

Users and Uses of Accounting

Accounting is the information system that identifies and records the economic events of an organization, and then communicates them to a wide variety of interested users.

Internal Users

- Plan, organize, and run companies.
- Financial directors, marketing managers, human resource personnel, production supervisors, and company officers.

External Users

- **Investors** → to make decisions to buy, hold, or sell their ownership interest.
- **Lenders** → to evaluate the risks of lending money.
- **Creditors** → to decide whether or not to grant credit.
- Customers, employees, labour unions, taxing authorities and regulators.

Ethical Behaviour By Users

- For accounting information to have value, preparers must have high ethical standards:
 - Actions are legal and responsible
 - Consider organization's interests
 - Accountants, other professionals, and most companies have rules or codes of conduct to guide ethical behaviour
 - Companies have rules of conduct
1. Recognize an ethical situation and the ethical issues involved.
 2. Identify and analyze the main elements in the situation.
 3. Identify the alternative, and weigh the impact of each alternative on various stakeholders.

Forms of Business Organization

Proprietorships

- Owned by one person
- Simple to set up
- Owner has control over business
- Unlimited liability (owner receives any profits, suffers any losses)
- Life of the proprietorship is limited to the life of the owner.
- The business profits are reported as self-employment income and taxed on the owner's personal income tax return.
- Business records must be kept separate from those related to the owner's personal activities. (Reporting entity concept)

Partnership

- Similar to proprietorship except owned by more than one person
- Formalized in a written agreement
 - Formation of the partnership
 - Partners' contributions
 - How profits and losses are shared
 - Provisions for withdrawals of assets and/or partners
 - Dispute resolution
 - Partnership liquidation
- Each partner has unlimited liability
- The business profits are reported as self-employment income and taxed on each partner's personal income tax return.
- Business records must be kept separate from those related to the partners' personal activities. (Reporting entity concept)

Corporations

- Separate legal entity owned by shareholders (owners of shares)
- Indefinite life
- Owners enjoy limited liability
- May be public or private:
 - Depends on whether shares are publicly traded
- Proprietors and partners pay personal income tax on their respective shares of the profits.
- Corporations pay income tax as separate legal entities on any corporate profits.

Public corporations distribute their financial statements to investors, lenders, other creditors, other interested parties, and the general public.

Private corporations issue shares, but they do not make them available to the general public. They almost never distribute their financial statements publically.

Business Activities

Financing Activities

- Obtaining (and repaying) funds to finance the operations of the business:
 - Borrowing money or repaying loans (debt financing)
 - Selling or repurchasing shares (equity financing)
- Forms of debt:
 - Bank indebtedness [Pre-arranged bank loan, company draws more money than cash on hand]
 - Bank loans [Money borrowed]
 - Noncurrent debt such as mortgages, bonds, leases

Investing Activities

- Purchase or sale of long-lived assets needed to operate the company
- Examples:
 - Purchase or sale of long-term investments
 - Purchase or sale of long-lived assets such as **property, plant and equipment** and intangible assets

Assets are resources that a company owns or controls.

Operating Activities

- Operating activities are the main day-to-day activities of the business
- Examples:
 - Revenues
 - Expenses
 - Related accounts such as accounts receivable and accounts payable

Financial Statements

Income statement: An income statement reports revenues and expenses to show how successfully a company performed during a period of time.

Statement of changes in equity: A statement of changes in equity shows the changes in each component of shareholders' equity, as well as total equity, during a period of time.

Statement of financial position [Balance Sheet]: A statement of financial position presents a picture of what a company owns (its assets), what it owes (its liabilities), and its net worth (its shareholders' equity) at a specific point in time.

Statement of cash flows: A statement of cash flows shows where a company obtained cash during a period of time and how that cash was used.

Income Statement

- Revenues:
 - Arise from the sale of a product or service
 - Result in an inflow of assets
- Expenses:
 - Costs of assets consumed or services used to generate revenues

$$\text{Profit (loss)} = \text{Revenues} - \text{expenses}$$

Amounts received from issuing shares are not revenues, and amounts paid out as dividends are not expenses.

Statement Of Changes In Equity

Shareholders' equity includes (1) **share capital** and (2) **retained earnings**.

- Share capital: amounts contributed by shareholders.
- Retained earnings: cumulative profit retained in the corporation.
 - Deficit: negative retained earnings.

Beginning balance of share capital → adds any changes (new shares, repurchased shares)

Statement Of Financial Position (Balance Sheet)

$$\text{Assets} = \text{Liabilities} + \text{Shareholders' Equity}$$

- Assets: Resources owned by a business
- Liabilities: Obligations of the business
- Shareholders' equity: Share capital and retained earnings

Statement Of Cash Flows

- Reports the effect on cash of the company's:
 - Operating activities
 - Investing activities
 - Financing activities
- Shows net increase or decrease in cash for the period

Relationships between the Statements

- Profit from income statement is reported in statement of changes in equity
- Ending balances of shareholders' equity is reported in both statements of financial position and changes in equity
- Statement of cash flows is related to statement of financial position

Annual Report

- Publicly traded companies must prepare an annual report each year
- Includes financial and nonfinancial information about the company:
 - Financial: management discussion and analysis ("MD&A") statement of management responsibility, auditors' report, financial statements and notes
 - Nonfinancial: company's mission and goals, products, people

Generally Accepted Accounting Principles (GAAP)

- Rules and practices for the preparation of financial statements
- Different for publicly-traded and private corporations:
 - Publicly-traded corporations use International Financial Reporting Standards (IFRS)
 - Private corporations may use IFRS or Accounting Standards for Private Enterprises (ASPE)
- Proprietorships and partnerships do not have to use IFRS or ASPE as statements are prepared for internal users only

The Classified Statement of Financial Position (Balance Sheet)

A classified statement of financial position generally contains the following standard classifications:

Assets

Current assets
Investments
Property, plant, and equipment
Goodwill

Liabilities and Shareholders' Equity

Current liabilities
Non-current liabilities
Shareholders' equity
 Share capital
 Retained earnings

Assets

Current Assets

- Assets expected to be converted to cash or used in the business within one year or one operating cycle:
 - Operating cycle is the average time it takes to go from cash to cash in producing revenue
- Usually listed in order of liquidity (Reverse order of liquidity also possible)

Common types of current assets include:

1. Cash
2. Short-term investments - investments in debt securities (shares of another company)
3. Accounts receivable – amounts owed to the company by customers
4. Accrued receivables – amounts owed to the company for interest, sales tax, rent...
5. Notes receivable – amounts owed to a company supported by a promise to repay
6. Inventory – goods held for sale to customers
7. Supplies – consumable items
8. Prepaid expenses – expenses paid in advance

Non-Current Assets

- Assets not expected to be converted to cash or used in the business within one year or one operating cycle

Common types of non-current assets include:

1. Investments – long term investments (loans, mortgages, bonds)
2. Property, plant, and equipment – tangible assets with long useful lives
3. Intangible assets and goodwill – assets that do not have a physical substance

Liabilities

Current Liabilities

- Obligations that are to be paid within the coming year or one operating cycle

Common examples of current liabilities include:

1. Bank indebtedness – short-term loan from a bank (line of credit)
2. Accounts payable – amounts owed by the company to suppliers for purchases made on credit
3. Accrued liabilities – amounts owed by the company salaries, rent, sales tax...

4. Notes payable – amounts owed supported by a promise to repay
5. Current maturities of long-term debt – portion of the payment due within the current year

Non-Current Liabilities

- Debts expected to be paid or settled after one year
- Usually accompanied by extensive notes to the financial statements

Common examples of non-current liabilities include:

1. Notes payable – including bank loans payable, mortgages payable, and bonds payable.
2. Lease obligations – amounts to be paid in the future on long-term rental contracts
3. Pension and benefit obligations – amounts owed to employees for retirement benefits
4. Deferred income tax liabilities – income tax that is expected to be payable later

Shareholders' Equity

Share capital

- Investment of cash (or other assets) in the company by shareholders in exchange for preferred or common shares

Retained earnings

- Cumulative profits kept for use in the company

Using the Financial Statements

- Ratio analysis expresses the relationships between selected items of financial statement data.
- Use comparisons to aid in analyses:
 - **Intracompany comparisons** covering two years for the same company
 - **Intercompany comparisons** based on comparisons with a competitor in the same industry
 - **Industry average** comparisons based on average ratios for particular industries

Using The Statement Of Financial Position (Balance Sheet)

Liquidity

- Measure a company's short-term ability of to pay its obligations that will come due within the next year

Working Capital: difference between current assets and current liabilities.

$$\text{Working Capital} = \text{Current Assets} - \text{Current Liabilities}$$

Current Ratio: dividing current assets and current liabilities.

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

HIGHER IS GENERALLY BETTER

CHAPTER 2

Solvency

- Measure a company's ability to survive over a long period of time:
 - The higher the percentage of debt to total assets, the greater the risk that debts cannot be repaid when they are due

Debt to Total Assets: measures the percentage of assets that is financed by lenders and other creditors rather than by shareholders.

$$\text{Debt to Total Assets} = \frac{\text{Total Liabilities}}{\text{Total Assets}}$$

LOWER IS GENERALLY BETTER

Using The Income Statement

Profitability

- Measure a company's operating success for a given period of time

Earnings per Share: measures the profit earned on each common share.

$$\text{Earnings per Share} = \frac{\text{Profit Available to Common Shareholders}}{\text{Weighted Average Number of Common Shares}}$$

Price-Earnings Ratio: ratio of the stock market price of each common share to its earnings per share.

$$\text{Price Earnings Ratio} = \frac{\text{Market Price per Share}}{\text{Earnings per Share}}$$

HIGHER IS GENERALLY BETTER

Framework for the Preparation and Presentation of Financial Statements

Conceptual Framework For Financial Reporting

Objective of financial reporting

- To provide financial information that is useful to existing and potential investors, lenders and other creditors
- Who are making decisions about providing resources to a company:
 - Buying, selling, holding equity and debt
 - Providing or settling loans or other credit
- Financial information is provided by general purpose financial statements using accrual accounting

Qualitative characteristics of useful financial information

- Identify the types of information that are likely to be most useful to existing and potential investors.

Fundamental Qualitative Characteristics

Relevance

- Information has relevance if it makes a difference in users' decisions

- May have predictive value and/or confirmatory value
 - Predictive: if it helps make predictions about future events.
 - Confirmatory: if it helps confirm or correct their previous predictions.
- Materiality is important: will information influence the decisions of users?

Faithful representation

- Information should reflect economic reality
- It must be complete, verifiable and free from material error

Enhancing Qualitative Characteristics

- Comparability
 - Users can identify and understand similarities and differences in items
- Verifiability
 - Independent consensus that information is faithfully represented
- Timeliness
 - Available before it loses its usefulness in decision-making
- Understandability
 - Classified, characterized and presented clearly and concisely

Cost Constraint

- Ensures that the value of the information provided by financial reporting is greater than the cost of providing it
- The benefits of financial reporting should justify the costs of providing and using it

Underlying Assumption

- The **going concern assumption** assumes that a company will continue in operation for the foreseeable future.

Elements of financial statements

- Assets
- Liabilities
- Equity
- Income
- Expenses

Measurements of the elements of financial statements

- Accountants have developed principles that describe when and how the elements of financial statements should be:
 - Recognized
 - Measured, and
 - Reported
- **Historical cost**
 - Assets and liabilities should be recorded at their cost when acquired
 - Not only at time of purchase, but throughout the life of each asset and liability
- **Fair value**
 - Certain assets and liabilities should be recorded and reported at fair value
- In choosing between these two, apply the concepts of relevance and representational faithfulness

Accounting Transactions

- Accounting information system: the system of collecting and processing transaction data and communicating financial information
- Can vary widely based on factors such as:
 - Type of business and its transactions
 - Size of company
 - Amount of data
 - Information requirements
- An accounting transaction occurs when assets, liabilities, or shareholders' equity items change as a result of some economic event.

Analyzing Transactions

- Transaction analysis determines impact on the accounting equation
$$\text{Assets} = \text{Liabilities} + \text{Shareholders' Equity}$$
- The accounting equation must always balance
 - Therefore, each transaction has a dual (double-sided) effect on the equation

Sierra Corporation Example:

Transaction (1): Investment by Shareholders. On October 1, cash of \$10,000 was invested in Sierra Corporation in exchange for 10,000 common shares.

Transaction (2): Issue of Note Payable. Also on October 1, Sierra borrowed \$5,000 from Scotiabank by signing a note payable. It promised to repay the note, plus 6% interest, in three months.

Transaction (3): Purchase of Equipment. On October 1, Sierra acquired equipment by paying \$5,000 cash to Superior Equipment.

Transaction (4): Receipt of Cash in Advance from Customer. On October 2, Sierra received a \$1,200 cash advance from R. Knox, a client, for advertising services that are expected to be completed before November 15.

Revenue should not be recorded until the work has been performed. However, since cash was received before performing the advertising services, Sierra has a liability for the work due. We call this liability *unearned revenue*.

Transaction (5): Payment of Rent. Also on October 2, Sierra Corporation paid its office rent for the month of October in cash, \$900. Expenses decrease retained earnings, which in turn decreases shareholders' equity.

Transaction (6): Purchase of Insurance. On October 3, Sierra paid \$600 for a one-year insurance policy effective October 1 that expires next year on September 30. Payments of expenses that will benefit more than one accounting period are identified as prepaid expenses or prepayments.

Transaction (7): Hiring of New Employees. On October 4, Sierra hired four new employees to begin work on Monday, October 8. Each employee will receive a weekly salary of \$500 for a five-day workweek, payable every two weeks.

Employees will receive their first paycheques on Friday, October 19.

There is no effect on the accounting equation because the company's assets, liabilities, and shareholders equity have not changed.

Transaction (8): Purchase of Supplies on Account. On October 9, Sierra purchased advertising materials on account from Aero Supply Corp. for \$2,500. The account is due in 30 days.

This transaction is referred to as a purchase "on account."

Transaction (9): Services performed on Account. On October 13, Sierra performed \$10,000 of advertising services for Copa Ltd. Sierra sent Copa a bill for these services asking for payment before the end of the month.

Revenue is earned when services are performed.

Transaction (10): Payment of Salaries. Employees worked two weeks, earning \$4,000 in salaries, and were paid on October 19.

Transaction (11): Payment of Dividend. On October 26, Sierra paid a \$500 cash dividend.

Dividends are a distribution of retained earnings rather than an expense.

Transaction (12): Collection of Account. On October 30, Copa paid Sierra the amount owing on its account.

	Assets					=	Liabilities			+	Shareholders' Equity			
	Cash	A/R	Sup.	Pre. Ins.	Equip.	A/P	N/P	Unearned Revenue	Common Shares	Rev.	Exp.	Div.		
(1)	+\$10,000								+10,000					
(2)	+5,000						+5,000							
(3)	-5,000				+5,000									
(4)	+1,200							+1,200						
(5)	-900										-900			
(6)	-600			+600										
(8)			+2,500			+2,500								
(9)		+10,000								+10,000				
(10)	-4,000										-4,000			
(11)	-500											-500		
(12)	+10,000	-10,000												
	<u>\$15,200</u>	<u>\$0</u>	<u>\$2,500</u>	<u>\$600</u>	<u>\$5,000</u>	<u>\$2,500</u>	<u>\$5,500</u>	<u>\$1,200</u>	<u>\$10,000</u>	<u>\$10,000</u>	<u>\$4,900</u>	<u>\$500</u>		

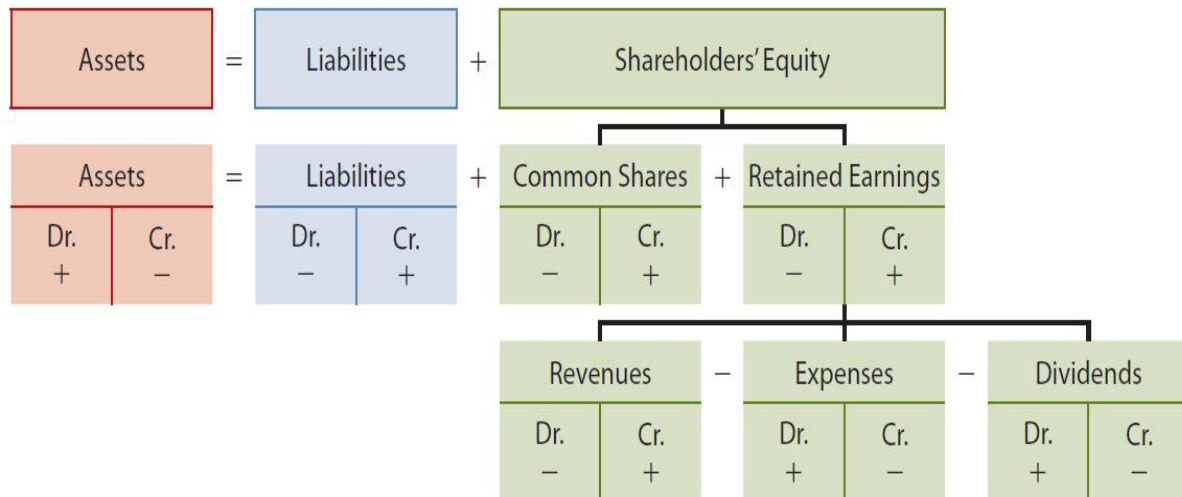
The Account

- An individual accounting record of increases and decreases in a specific asset, liability, or shareholders' equity item
- Three parts:
 - 1) The title of the account
 - 2) A left or debit side
 - 3) A right or credit side

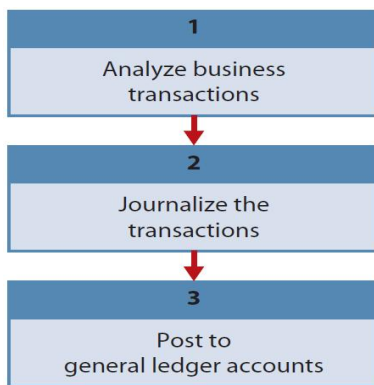
Debits and Credits

- Describe where entries are made in the accounts:
 - Debiting: entering an amount on the left side
 - Crediting: entering an amount on the right side
- Add up each side:
 - If the greater sum is on the left, the account has a **debit balance**.
 - If the greater sum is on the right, the account has a **credit balance**.

Normal Balances



Steps in the Recording Process



Step 1: Each transaction is analyzed to determine if it has an effect on the account. Evidence of the transaction comes from a **source document**.

Step 2: The transaction information is recorded as a journal entry in the **general journal**.

Step 3: The information is transferred from the general journal to the appropriate accounts in the **general ledger**.

THE JOURNAL

- Transactions are recorded in chronological order in the journal and then transferred to the accounts.
- For each transaction, the journal shows the debit and credit effects on specific accounts.
- The general journal makes several contributions to the recording process:

1. It discloses the complete effect of a transaction in one place, including an explanation and, where applicable, identification of the source document.
2. It provides a chronological record of transactions.
3. It helps to prevent and locate errors, because the debit and credit amounts for each entry can be quickly compared.

General Journal			
Date	Account Titles and Explanations	Debit	Credit
2012 Oct. 1	Cash Common Shares (Issued common shares)	10,000	10,000

Note the following features of the journal entry:

1. The date of the transaction is entered in the Date column.
2. The account to be debited is entered first at the left. The account to be credited is then entered on the next line, indented under the line above. The indentation differentiates debits from credits and decreases the chance of switching the debit and credit amounts by mistake.
3. The amounts for the debits are recorded in the Debit (left) column, and the amounts for the credits are recorded in the Credit (right) column.
4. A brief explanation of the transaction is given.

THE LEDGER

- Entire group of accounts maintained by a company
 - List of accounts is called a **chart of accounts**
- Contains all the asset, liability, and shareholders' equity accounts
- **Posting** is the process of transferring information from the general journal to the general ledger accounts

THE RECORDING PROCESS ILLUSTRATED

SIERRA CORPORATION General Journal			
Date	Account Titles and Explanations	Debit	Credit
2012 Oct. 1	Cash Common Shares (Issued common shares)	10,000	10,000
1	Cash Notes Payable (Issued three-months, 6% note payable for cash)	5,000	5,000
1	Equipment Cash (Purchased equipment for cash)	5,000	5,000

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2	Cash Unearned Revenue (Received advance from R. Knox for future service)	1,200	1,200
2	Rent Expense Cash (Paid cash for October office rent)	900	900
3	Prepaid Insurance Cash (Paid one-year insurance policy; effective October 1)	600	600
9	Supplies Accounts Payable (Purchased supplies on account from Aero Supply)	2,500	2,500
13	Accounts Receivable Service Revenue (Performed services on account for Copa)	10,000	10,000
19	Salaries Expense Cash (Paid salaries for Oct 8-19)	4,000	4,000
26	Dividends Cash (Paid cash dividends)	500	500
30	Cash Accounts Receivable (Received cash on account from Copa)	10,000	10,000

SIERRA CORPORATION					
General Ledger					
Cash			Unearned Revenue		
Oct. 1	10,000	Oct. 1	5,000	Oct. 2	1,200
1	5,000	2	900	Bal.	1,200
2	1,200	3	600		
30	10,000	19	4,000	Notes Payable	
		26	500	Oct. 1	5,000
Bal.	15,200			Bal.	5,000
Accounts Receivable			Common Shares		
Oct 13	10,000	Oct. 30	10,000	Oct. 1	10,000
Bal.	0			Bal.	10,000
Supplies			Dividends		
Oct. 9	2,500	Oct. 26	500		
Bal.	2,500	Bal.	500		

Prepaid Insurance		Service Revenue		
Oct. 3	600		Oct. 13 10,000	
Bal.	600		Bal. 10,000	
Equipment		Salaries Expense		
Oct. 1	5,000	Oct. 19	4,000	
Bal.	5,000	Bal.	4,000	
Accounts Payable		Rent Expense		
	Oct. 9	2,500	Oct. 2	900
	Bal.	2,500	Bal.	900

The Trial Balance

Step 4: Prepare a **trial balance**.

- List of all the accounts and their balances at a specific time
- Serves to prove the mathematical equality of debits and credits after posting
Sum of debits = sum of credits
- Aids in the preparation of financial statements

The procedure for preparing a trial balance is as follows:

1. List the account titles and their balances in the same order as the chart of accounts. Debit balances should be entered in the debit column and credit balances in the credit column.
2. Total the debit column and the credit column.
3. Ensure that the debit and credit column totals are equal.

SIERRA CORPORATION		
Trial Balance		
October 31, 2012		
	Debit	Credit
Cash	\$15,200	
Supplies	2,500	
Prepaid insurance	600	
Equipment	5,000	
Accounts payable		\$ 2,500
Unearned revenue		1,200
Notes payable		5,000
Common shares		10,000
Dividends	500	
Service revenue		10,000
Salaries expense	4,000	
Rent expense	900	
	<u>\$28,700</u>	<u>\$28,700</u>

Timing Issues

- Companies need immediate feedback on how well they are doing
- Accounting divides the economic life of a business into artificial time periods
 - Month, quarter, year
 - Many transactions affect more than one time period

Revenue Recognition

- Revenue is recognized when:
 - Sales or performance effort is substantially complete
 - Amount is determinable (measurable)
 - Collection is reasonably assured
- In a merchandising company:
 - When merchandise is sold (point of sale)
- In a service company:
 - When the service is performed

Expense Recognition

- Expenses are recognized when:
 - Due to ordinary activity, a decrease in future economic benefits occurs
 - Related to a decrease in an asset or an increase in a liability
 - It can be measured reliably
- Tied to changes in assets and liabilities
- Often (but not always) coincides with revenue recognition

Accrual Versus Cash Basis of Accounting

Accrual

- Transactions affecting a company's financial statements are recorded in the period the events occur, rather than when cash is received or paid
 - Revenue is recorded when **earned**, rather than when cash is received
 - Expenses are recorded when goods or services are **consumed**, rather than when cash is paid

Cash

- Revenue is recorded only when cash is **received**
- Expenses are recorded only when cash is **paid**
- Can lead to misleading financial statements:
 - Revenue and expenses can be manipulated by timing the receipt and payment of cash
 - Can increase or decrease profit

The Basics of Adjusting Entries

- Adjusting entries are made to adjust or update accounts at the **end** of the accounting period
- Required because the trial balance may not contain complete and up-to-date data
 - Some items are not recorded daily
 - Some costs are not recorded during the accounting period, as they expire due to the passage of time
 - Some items may be unrecorded

Types of Adjusting Entries

Prepayments

- **Prepaid expenses:** Expenses paid in cash and recorded as assets before they are used or consumed.
- **Unearned revenues:** Cash received and recorded as liabilities before revenue is earned.

Accruals

- **Accrued revenues:** Revenues earned but not yet received in cash or recorded.
- **Accrued expenses:** Expenses incurred but not yet paid in cash or recorded.

Adjusting Entries for Prepayments

- Prepayments increase current assets such as prepaid expenses and certain types of non-current assets.
- Adjusting entries for prepayments allocate a cost from an asset or liability account to an expense or revenue account.

Prepayments made:

- The adjusting entry records the expense that applies to the current period and reduces the asset account that was originally recorded.

Prepayments received:

- The adjusting entry records the revenue earned in the period and reduces the liability account where the unearned revenue was originally recorded.

Prepaid Expenses

- Costs that are paid for in cash before they are used
 - When the cost is incurred, an asset (prepaid) is increased (to show the future service or benefit) and cash is decreased
- Expire with the passage of time or through use
 - Not practical to record this expiration on a daily basis, so done when statements are prepared
- Adjusting entry increases an expense account and decreases the asset (prepaid) account

Depreciation

- The process of allocating the cost of a long-lived or non-current asset to expense over its useful life.

Depreciation: normally used in relation to property, plant, and equipment.

Amortization: used in relation to intangible assets.

Depletion: used in relation to natural resources.

CHAPTER 4

- Depreciation is an allocation concept, not a valuation concept.
 - We depreciate an asset to allocate its cost to the periods over which we use it.
 - Not recording a change in the actual value of the asset.

Calculation of Depreciation

- Straight-line method of depreciation: divide the cost of the asset by its useful life.
- At the time an asset is acquired, its useful life is not known with any certainty.
 - It must be estimated
 - Depreciation is an estimate rather than a factual measurement of the cost that has expired.

Unearned Revenue

- Cash that has been received before revenue is earned
 - When the cash is received, a liability account (unearned revenue) is increased and cash is increased
- The opposite of prepaid expenses
- Adjusting entry decreases the liability (unearned revenue) account and increases a revenue account
 - Reflects the amount of revenue earned in the period and the remaining liability at the end of the period

Adjusting Entries for Accruals

- Accruals have not been recognized at all until an adjustment is made
- Revenues that have been earned, but not received in cash (accrued revenues)
 - Adjusting entry results in an increase to both an asset and a revenue account
- Expenses that have been incurred, but not yet paid or recorded (accrued expenses)
 - Adjusting entry results in an increase to both an expense and a liability account

Accrued Revenues

- Accrued revenues may accumulate (accrue) with the passing of time, as in the case of interest revenues.
- They may result from services that have been performed but not yet billed or collected, such as fees.

An adjusting entry is required for two purposes:

1. To show the receivable that exists at the statement of financial position date.
2. To record the revenue that has been earned during the period.

Accrued Expenses

- Interest, rent, salaries, property tax, and income tax are common examples.
- Accrued expenses result from the same factors as accrued revenues.

Adjustments for accrued expenses are necessary to:

1. Record obligations that exist at the statement of financial position date.
2. Recognize the expenses that apply to the current accounting period.

Adjusting entries illustrated

Adjustment (1): Prepaid expenses – supplies.	A count at the close of business on October 31 reveals that \$1,000 of supplies are still on hand.
Adjustment (2): Prepaid expenses – insurance.	On October 3, Sierra Corporation paid \$600 for a one-year insurance policy. Coverage began on October 1.
Adjustment (3): Prepaid expenses – depreciation.	The \$5000 equipment purchased on October 1 is expected to have a useful life of 5 years.
Adjustment (4): Unearned revenues.	R. Knox paid \$1,200 on October 2 for advertising services expected to be completed by November 15. From an evaluation of the work performed by Sierra for Knox during October, it is determined that \$400 worth of work was done in October.
Adjustment (5): Accrued revenues – accounts receivable.	In October, Sierra Corporation earned \$200 for advertising services that were not billed to the clients before October 31.
Adjustment (6): Accrued expenses – interest.	Sierra Corporation signed a three-month note payable for \$5000 on October 1. The note bears interest at an annual rate of 6%. ($\$5,000 \times 6\% \times 3/12$)
Adjustment (7): Accrued expenses – salaries.	Salaries are paid every two weeks. Sierra's four employees were last paid on October 19. The next payment of salaries will not occur until November 2. The four employees each receive a salary of \$100 a day. ($8 \text{ days} \times \$100/\text{day} \times 4 \text{ employees}$)
Adjustment (8): Accrued expenses – income tax.	For accounting purposes, corporate income tax must be accrued based on the current year's estimated profit. Sierra's monthly income tax expense is estimated to be \$200.

SIERRA CORPORATION General Journal			
Date	Account Titles and Explanations	Debit	Credit
2012 Oct. 31	Supplies Expense Supplies (To record supplies used)	1,500	1,500
31	Insurance Expense Prepaid Insurance (To record insurance expired)	50	50
31	Depreciation Expense Accumulated Depreciation - Equipment (To record monthly depreciation)	83	83
31	Unearned Revenue Service Revenue (To record revenue earned)	400	400
31	Accounts Receivable Service Revenue (To accrue revenue earned but not billed or collected)	200	200

CHAPTER 4

31	Interest Expense Interest Payable (To accrue interest on note payable)	25	25
31	Salaries Expense Salaries Payable (To record accrued salaries)	3,200	3,200
31	Income Tax Expense Income Tax Payable (To record accrued income tax)	200	200

SIERRA CORPORATION			
General Ledger			
Cash			
Oct. 1	10,000	Oct. 1	5,000
1	5,000	2	900
2	1,200	3	600
30	10,000	19	4,000
		26	500
Oct. 31	Bal. 15,200		
Accounts Receivable			
Oct. 1.	10,000	Oct. 30	10,000
31	Adj. 200		
Oct. 31	Bal. 200		
Supplies			
Oct. 9	2,500	Oct. 31	Adj. 1,500
Oct. 31	Bal. 2,500		
Prepaid Insurance			
Oct. 3	600	Oct. 31	Adj. 50
Oct. 31	Bal. 600		
Equipment			
Oct. 1	5,000		
Oct. 31	Bal. 5,000		
Accounts Payable			
		Oct. 9	2,500
		Oct. 31	Bal. 2,500
Unearned Revenue			
		Oct. 2	1,200
		Oct. 31	Bal. 1,200
Notes Payable			
		Oct. 1	5,000
		Oct. 31	Bal. 5,000
Common Shares			
		Oct. 1	10,000
		Oct. 31	Bal. 10,000
Dividends			
		Oct. 26	500
		Oct. 31	Bal. 500
Service Revenue			
		Oct. 13	10,000
		31	Adj. 400
		31	Adj. 200
		Oct. 31	Bal. 10,600
Salaries Expense			
		Oct. 19	4,000
		31	Adj. 3,200
		Oct. 31	Bal. 7,200
Rent Expense			
		Oct. 2	900
		Oct. 31	Bal. 900

Accumulated Depreciation - Equipment				Depreciation Expense			
	Oct. 31	Adj.	83	Oct. 31	Adj.	83	
	Oct. 31	Bal.	83	Oct. 31	Bal.	83	
Salaries Payable				Supplies Expense			
	Oct. 31	Adj.	3,200	Oct. 31	Adj.	1,500	
	Oct. 31	Adj.	3,200	Oct. 31	Bal.	1,500	
Income Tax Payable				Insurance Expense			
	Oct. 31	Adj.	200	Oct. 31	Adj.	50	
	Oct. 31	Bal.	200	Oct. 31	Bal.	50	
Interest Payable				Interest Expense			
	Oct. 31	Adj.	25	Oct. 31	Adj.	25	
	Oct. 31	Bal.	25	Oct. 31	Adj.	25	
Unearned Revenue				Income Tax Expense			
Oct. 31	Adj.	400	Oct. 2	1,200	Oct. 31	Adj.	200
	Oct. 31	Bal.	800	Oct. 31	Bal.	200	

The Adjusted Trial Balance and Financial Statements

- Prepared after all adjusting entries have been journalized and posted
- Shows the balances of all accounts at the end of the accounting period
 - Including those accounts that have been adjusted
- Proves the equality of total debit balances and total credit balances after the adjusting entries have been made
- The main source for preparation of financial statements

Sierra Corporation		
Adjusted Trial Balance		
October 31, 2012		
	Debit	Credit
Cash	\$15,200	
Accounts receivable	200	
Supplies	1,000	
Prepaid insurance	550	
Equipment	5,000	
Accumulated depreciation – equipment		\$83
Accounts payable		2,500
Salaries Payable		3,200
Income Tax Payable		200
Interest Payable		25
Unearned revenue		800
Notes payable		5,000

CHAPTER 4

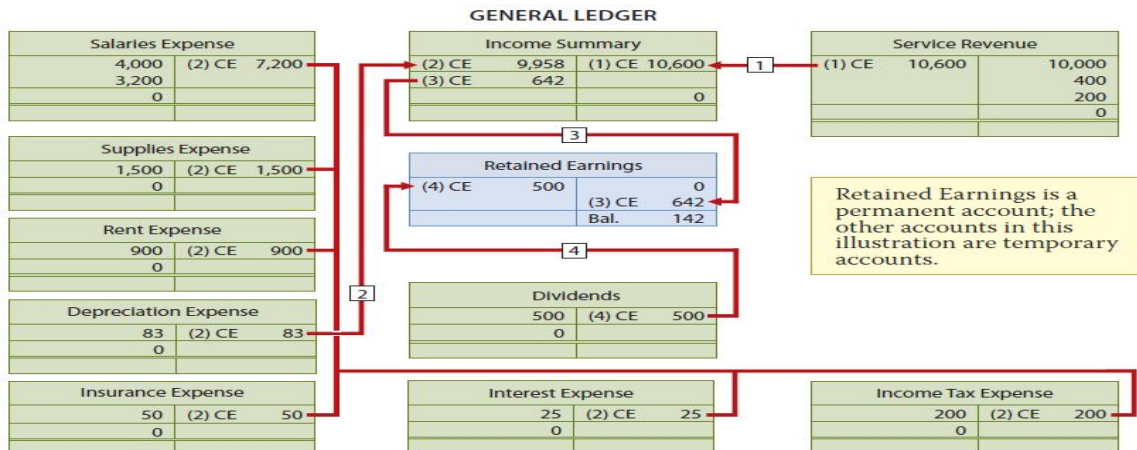
Common shares		10,000
Retained earnings		0
Dividends	500	
Service revenue		10,000
Salaries expense	7,200	
Supplies expense	1,500	
Rent expense	900	
Depreciation expense	83	
Insurance expense	50	
Interest expense	25	
Income tax expense	200	
	<u>\$32,408</u>	<u>\$32,408</u>

Closing the Books

- Revenue and expense accounts are subdivisions of retained earnings
 - Considered to be **temporary accounts**
- Statement of financial position accounts carry forward into the future
 - Considered to be **permanent accounts**
- Closing entries
 - Temporary account balances are transferred to Retained Earnings
 - Produce a zero balance in the temporary accounts to prepare them for the next period's activity

Preparing Closing Entries

1. Close revenue accounts:
 - Debit each revenue account for its balance and credit Income Summary
2. Close expense accounts:
 - Debit Income Summary and credit each expense account for its balance
3. Close Income Summary:
 - Debit (or credit) Income Summary for the balance in the account and credit (debit) Retained Earnings
4. Close Dividends account:
 - Debit Retained Earnings and credit Dividends account for the balance



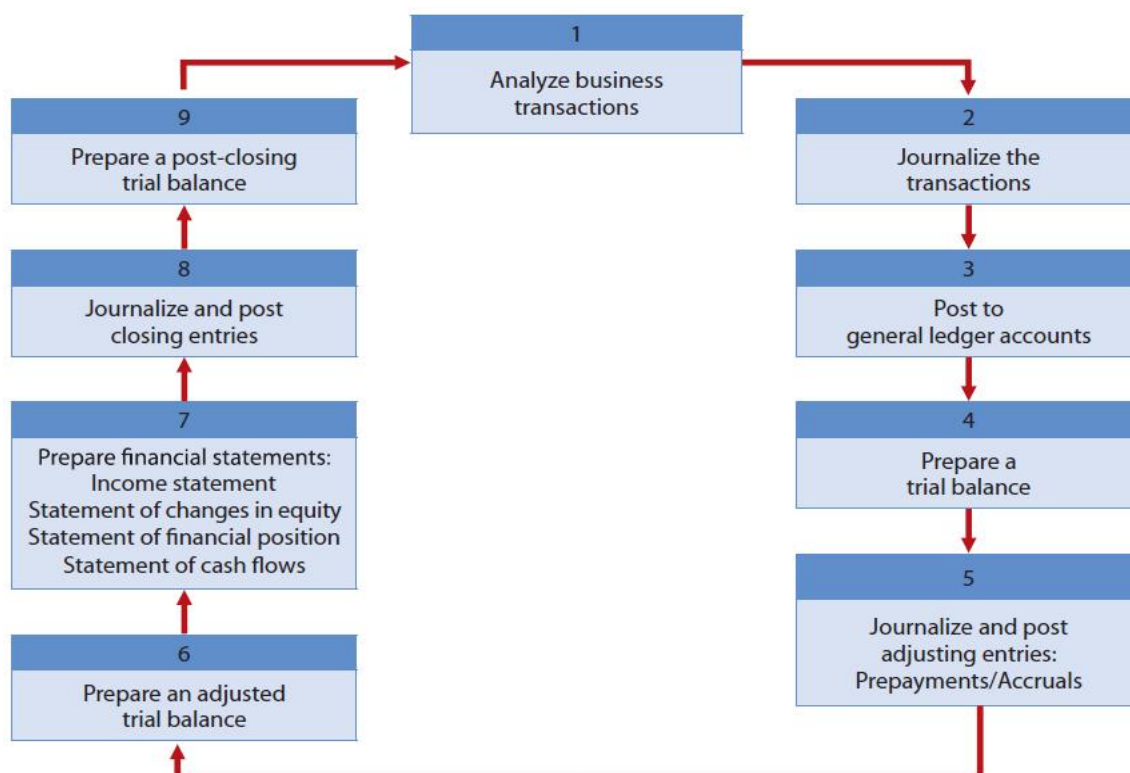
Other Comprehensive Income and Accumulated Other Comprehensive Income

- For companies reporting under IFRS only
 - Companies reporting under ASPE do not recognize OCI
- May have complex items that determine OCI rather than profit
 - Similar to revenues and expenses
- Items in OCI plus profit = comprehensive income

Preparing a Post-Closing Trial Balance

- Lists all permanent accounts and their balances
 - After all closing entries are journalized and posted
- Proves the equality of total debit balances and total credit balances after the closing entries have been made

Summary of the Accounting Cycle



Chapter 5

Merchandising Operations

- Merchandising involves purchasing products (inventory) to resell to customers.
 - *Retailers* sell to consumers
 - *Wholesalers* sell to other companies
 - *Manufacturers* produce goods for sale

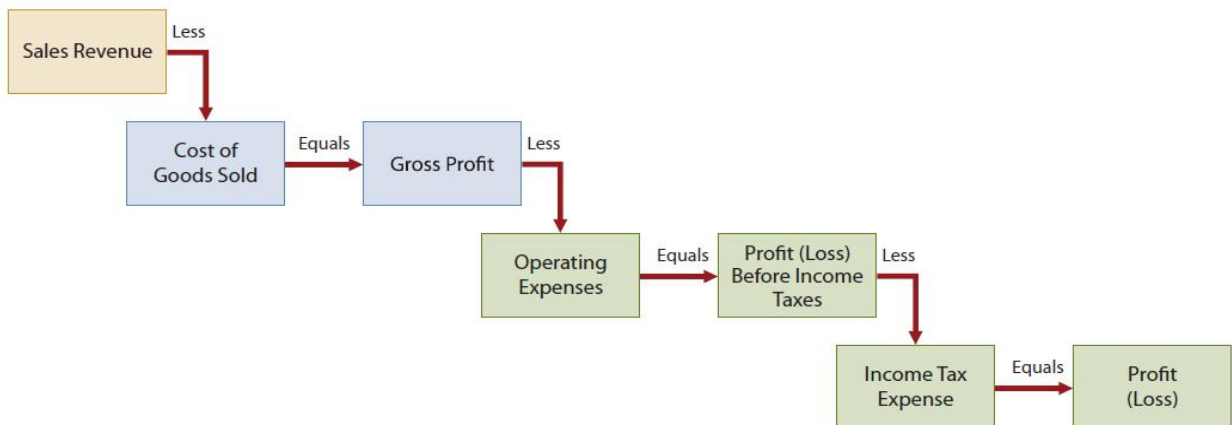
Operating Cycles

- The time it takes to go from cash to cash in producing revenues.
- Usually longer for a merchandising company than it is for a service company.

Income Measurement Process

Expenses for a merchandising company are divided into two categories:

1. Cost of goods sold: total cost of the merchandise that was sold during the period.
2. Operating expenses: expenses that are incurred in the process of earning sales revenue.



Inventory Systems

- Flow of costs for a merchandising company:
 - Beginning inventory + purchases = cost of goods available for sale
 - Once sold, these costs are assigned to cost of goods sold
 - Goods left over are ending inventory
- One of these two systems is used to account for inventory (statement of financial position) and cost of goods sold (income statement):
 - Perpetual inventory system
 - Periodic inventory system

Perpetual Inventory System

- Detailed records are kept for the cost of each product bought and sold
- These records are updated constantly for purchases and sales
- A physical count is done at least once a year to adjust perpetual records to actual

- This system enables the effective control of inventory which is an important asset
- The cost of goods sold and the reduction in inventory – both its quantity and cost – are recorded each time a sale occurs.

Periodic Inventory System

- Detailed records of merchandise are not kept throughout the period
- Cost of goods sold is only determined at the end of the accounting period:
 - Once inventory is counted
 - $\text{Cost of goods sold} = \text{Beginning inventory} + \text{cost of purchases less ending inventory}$

The following steps are necessary:

1. **Beginning inventory:** Determine the cost of goods on hand at the beginning of the accounting period.
2. **Cost of goods available for sale:** Add the cost of goods purchased to the beginning inventory. The total is the **cost of goods available for sale** during the period.
3. **Ending inventory:** Determine the cost of goods on hand at the end of the accounting period from the physical inventory count.
 - Subtract the ending inventory from the cost of goods available for sale; the result is the cost of goods sold.

Recording Purchases of Merchandise

Purchases

- Purchases are recorded in the Merchandise Inventory account
- Includes all costs to get merchandise to place of business and ready for resale:
 - Includes freight and applicable taxes
 - Less purchase returns, allowances, discounts
- Credit purchases are supported by a purchase order

Sales Taxes

- Most merchandising and service companies collect sales taxes on the goods they sell and services they provide.
- Merchandising companies pay GST or HST on the cost of the goods they purchase.
- GST and HST paid does not form part of cost of goods (refunded)

Freight Costs

- The invoice should indicate whether the seller or the buyer must pay the cost of transporting the goods.
- Freight paid by the buyer is part of the cost of the merchandise purchased
- FOB (Free on Board) – refers to where title or ownership of goods transfers:
 - FOB shipping point: seller's place of business
 - Ownership of the goods passes from the seller to the buyer as soon as the goods are shipped

CHAPTER 5

- FOB destination: buyer's place of business
 - Ownership of the goods does not pass from the seller to the buyer until the goods are received by the buyer (i.e. destination point)

Purchase Returns and Allowances

- A purchaser returns the goods to the seller and receives a cash refund or credit
- The buyer may choose to keep the merchandise if the seller is willing to give an allowance (deduction) from the purchase price
- In both cases, the result is a decrease to Merchandise Inventory (the cost of goods purchased)

Discounts

- A quantity discount gives a price reduction according to the volume of the purchase:
 - Not recorded separately – discounted price is recorded as cost of purchase
- A purchase discount is offered to encourage early payment of a balance due. Example: 2/10, n/30:
 - 2% cash discount may be taken on the invoice price if payment is made within 10 days. Otherwise, the invoice price is due in 30 days.
 - Recorded separately when payment made. Results in a decrease to Merchandise Inventory account

Recording Sales of Merchandise

Sales

- Two journal entries are required to record each sale in a perpetual inventory system.
 - First entry records sales revenue
 - Second entry records the cost of the merchandise sold.

Sales Taxes

- When a company collects sales taxes from selling a product or service, these sales taxes are not recorded as revenue.
- Sales taxes that are collected from selling a product or service are recorded as a liability until they are paid to the government.

Freight Costs

- FOB destination – the seller assumes the responsibility.
- Freight costs incurred by the seller on outgoing merchandise are an operating expense to the seller.
- Debited to the account 'Freight Out' or 'Delivery Expense'.

Sales Returns and Allowances

- Also require two separate entries.

- The first entry records a debit to the Sales Returns and Allowances account and a credit to the Accounts Receivable/Cash account.
- The second journal entry debits the Merchandise Inventory account and credits the Cost of Goods Sold account.
- Sales returns and allowances are a contra revenue account to Sales
- If the merchandise is not resalable and is discarded, a second entry is not made.

Discounts

- No separate entry is made to record a **quantity discount**.
- Sales are recorded at the invoice price.
- The account 'Sales Discounts' is added to record sales discounts.
 - Contra revenue account to sales – normal debit balance.

Summary of Merchandising Entries

Purchases

Transactions	Recurring Journal Entries	Debit	Credit
Purchasing merchandise for resale.	Merchandise Inventory	XX	
	Cash or Accounts Payable		XX
Paying freight costs on merchandise purchased FOB shipping point.	Merchandise Inventory	XX	
	Cash		XX
Receiving purchase returns or allowances from suppliers.	Cash or Accounts Payable	XX	
	Merchandise Inventory		XX
Paying creditors on account within discount period.	Accounts Payable	XX	
	Merchandise Inventory		XX
	Cash		XX
Paying creditors on account after discount period.	Accounts Payable	XX	
	Cash		XX

Sales

Transactions	Recurring Journal Entries	Debit	Credit
Selling merchandise to customers.	Cash or Accounts Receivable	XX	
	Sales		XX
	Cost of Goods Sold	XX	
	Merchandise Inventory		XX
Giving sales returns or allowances to customers.	Sales Returns and Allowances	XX	
	Cash or Accounts Receivable		XX
	Merchandise Inventory	XX	
	Cost of Goods Sold		XX
Paying freight costs on sales, FOB destination.	Freight Out	XX	
	Cash		XX
Receiving payment on account from customers within discount period.	Cash	XX	
	Sales Discounts	XX	
	Accounts Receivable		XX
Receiving payment on account from customers after discount period.	Cash	XX	
	Accounts Receivable		XX

Income Statement Presentation

Single-Step Income Statement

- All data is classified into revenue or expenses.
- Income tax expense is usually disclosed separately from the other expenses.
- Cost of goods sold, interest expense, and income tax expense must be separately reported.
- The remaining expenses can be including directly in the income statement, or can be summarized into one or more lines.

Revenues	\$460,000
Net sales	<u>3,400</u>
Interest revenue	<u>463,400</u>
Total revenues	
Expenses	
Cost of goods sold	316,000
Operating expenses	114,000
Interest expense	1,800
Loss on sale of equipment	<u>200</u>
Total expenses	<u>432,000</u>
Profit before income tax	31,600
Income tax expense	<u>6,300</u>
Profit	<u><u>\$ 25,300</u></u>

Multiple-Step Income Statement

The multiple-step income statement shows five main steps:

1. Net sales: Sales returns and allowances and sales discounts are subtracted from gross sales to determine net sales.
2. Gross profit: Cost of goods sold is subtracted from net sales to determine gross profit.
3. Profit from operations: Operating expenses are deducted from gross profit to determine profit from operations.
4. Non-operating activities: The results of activities that are not related to operations are added (as other revenues and gains) or subtracted (as other expenses and losses) to determine profit before income tax.
5. Profit: Income tax expense is subtracted from profit before income tax to determine profit (loss).

Net Sales

- Begins by presenting sales revenue.
- The two contra revenue accounts, Sales Returns and Allowances and Sales Discounts, are deducted from gross sales in the income statement to arrive at net sales.

Gross Profit

- Cost of goods sold is deducted from net sales to determine gross profit.
- Gross profit represents the **merchandising profit** of a company.

Profit from Operations

- Calculated by subtracting operating expenses from gross profit.

Non-Operating Activities

- Consists of other revenues and gains, as well as other expenses and losses that are unrelated to the company's main operations.

Profit

- The final outcome of all the company's operating and non-operating activities.

Sales revenues		
Sales		\$480,000
Less: Sales returns and allowances	\$12,000	
Sales discounts	<u>8,000</u>	<u>20,000</u>
Net sales		460,000
Cost of goods sold		<u>316,000</u>
Gross profit		144,000
Operating expenses		
Salaries expense	\$45,000	
Rent expense	19,000	
Utilities expense	17,000	
Advertising expense	16,000	
Depreciation expense	8,000	
Freight out	7,000	
Insurance expense	2,000	
Loss on sale of equipment	<u>200</u>	<u>114,200</u>
Profit from operations		29,800
Other revenues and gains		
Interest revenue	\$3,400	
Other expenses and losses		
Interest expense	<u>1,600</u>	<u>1,800</u>
Profit before income tax		31,600
Income tax expense		6,300
Profit		<u>\$ 25,300</u>

Evaluating Profitability**Gross Profit Margin**

- Measures the gross profit expressed as a percentage of net sales

$$\text{Gross Profit Margin} = \frac{\text{Gross Profit}}{\text{Net Sales}}$$

HIGHER IS GENERALLY BETTER

Profit Margin

- Measures the percentage of each dollar of sales that results in profit

$$\text{Profit Margin} = \frac{\text{Profit}}{\text{Net Sales}}$$

HIGHER IS GENERALLY BETTER

Appendix 5A: Periodic Inventory System

- Compare to perpetual inventory system:
 - Differences in recording purchases
 - Differences in recording sales
 - Cost of goods sold is calculated only at the end of a period, using ending inventory count

Calculating Cost of Goods Sold

Three Steps are required:

1. Calculate the cost of goods purchased
2. Determine ending inventory
3. Calculate the cost of goods sold

$$\begin{array}{|c|} \hline \text{Beginning} \\ \text{Inventory} \\ \hline \end{array} + \begin{array}{|c|} \hline \text{Cost of Goods} \\ \text{Purchased} \\ \hline \end{array} = \begin{array}{|c|} \hline \text{Cost of Goods} \\ \text{Available} \\ \text{for Sale} \\ \hline \end{array} - \begin{array}{|c|} \hline \text{Ending} \\ \text{Inventory} \\ \hline \end{array} = \begin{array}{|c|} \hline \text{Cost of} \\ \text{Goods Sold} \\ \hline \end{array}$$

Determining Inventory Quantities

- Whether companies use a periodic or perpetual system, physical inventory must still be counted at the end of the period:
 - To check the accuracy of the perpetual inventory records
 - To determine the amount of inventory lost to shrinkage or theft

Determining inventory quantities involves two steps:

1. Taking a physical inventory of goods on hand
2. Determining the ownership of goods.

Taking a Physical Inventory

- To ensure inventory is properly counted, companies must have a good system of internal control:
 - Employees who perform the count should not have responsibility for custody or record-keeping
 - Counter establishes validity of item
 - Second count by another employee or auditor
 - Pre-numbered tags

Determining Ownership of Goods

- Need to consider ownership of goods when taking inventory
- Goods in transit at the end of the period make the determination of ownership more complicated:
 - Determine who has legal title to goods in transit
 - Include in inventory if company has legal title
- Apply freight/shipping concepts from Chapter 5:
 - FOB shipping point versus FOB destination
- Ownership of consigned goods remains with the owner (the consignor), not the holder of the goods (the consignee)
- Goods taken home “on approval” by a customer are still owned by the company

Inventory Cost Determination Methods

- Once inventory quantities are counted, must apply unit costs to determine total cost of inventory
- Units of the same inventory can be purchased at different prices
- Which costs should be used?

Specific Identification

- Tracks physical flow of goods
- Used in perpetual system only
- Can only be used where

CHAPTER 6

- Actual costs of each item can be determined
- Goods are easily distinguishable
- Or for goods produced and segregated for specific projects

Cost Formulas

- Cost formulas assume a flow of costs that may not be the same as the actual flow of goods

Two common inventory cost formulas are:

1. *First-in, first-out (FIFO)*, where the cost of the first item purchased is considered to be the cost of the first item sold.
2. *Average*, where the cost is determined using a weighted average of the cost of the items purchased.

First-In, First-Out

- Assumes that the earliest (oldest) goods purchased are the first ones to be sold.
- Does not mean that the oldest units are in fact sold first, only that the cost of the oldest units is recognized first.
- Ending inventory and cost of goods sold under FIFO are the same for periodic and perpetual inventory systems

Date	Purchases			Cost of Goods Sold			Balance		
	Units	Cost	Total	Units	Cost	Total	Units	Cost	Total
Jan. 1							100	\$10	\$1,000
Apr. 15	200	\$11	\$ 2,200				100	10	} 3,200
							200	11	
May 1				100	\$10	} \$1,550	150	11	1,650
				50	11				
Aug. 24	300	12	3,600				150	11	} 5,250
							300	12	
Sept. 10				150	11	} 4,650	50	12	600
				250	12				
Nov. 27	400	13	5,200				50	12	} 5,800
							400	13	
	<u>900</u>		<u>\$11,000</u>	<u>550</u>		<u>\$6,200</u>			

Average

- Used when physical flow of inventory cannot be measured
- Under a perpetual inventory system, a new weighted (called moving) average is calculated after each purchase
 - Used to record cost of goods sold and ending inventory

Cost of Goods Available for Sale	÷	Units Available for Sale	=	Weighted Average Unit Cost
----------------------------------	---	--------------------------	---	----------------------------

Date	Purchases			Cost of Goods Sold			Balance		
	Units	Cost	Total	Units	Cost	Total	Units	Cost	Total
Jan. 1							100	\$10.00	\$1,000.00
Apr. 15	200	\$11.00	\$ 2,200.00				300	10.67	3,200.00
May 1				150	\$10.67	\$1,600.00	150	10.67	1,600.00
Aug. 24	300	12.00	3,600.00				450	11.56	5,200.00
Sept. 10				400	11.56	4,622.22	50	11.56	577.78
Nov. 27	400	13.00	5,200.00				450	12.84	5,777.78
	<u>900</u>		<u>\$11,000.00</u>	<u>550</u>		<u>\$6,222.22</u>			

Effects of Cost Determination Methods

Choice of Cost Determination

- Choose a method that best
 - Represents physical flow of goods,
 - Reports ending inventory at recent cost, and
- Use the same method for inventories of similar nature and usage

Advantages of cost determination methods

Specific Identification	FIFO	Average
<ul style="list-style-type: none"> • Exactly matches costs and revenues on the income statement. • Tracks the actual physical flow. 	<ul style="list-style-type: none"> • Ending inventory on the statement of financial position includes the most current costs (closest to replacement cost). • Approximates the physical flow of most retailers. 	<ul style="list-style-type: none"> • Cost of goods sold on the income statement includes more current costs than FIFO. • Smooths the effects of price changes by assigning all units the same average cost.

Inventory Errors

- Errors can occur in accounting for inventory
 - Incorrect counting or costing
 - Transfer of title not recognized
- Errors affect both
 - Statement of financial position – through merchandise inventory
 - Income statement – through cost of goods sold

Income Statement Effects

Nature of Error	Net sales	-	Cost of Goods Sold	=	Gross Profit	-	Operating Expenses	=	Profit Before Income Tax
Understate beginning inventory or cost of goods purchased	NE		U		O		NE		O
Overstate beginning inventory or cost of goods purchased	NE		O		U		NE		U

U = Understatement O = Overstatement NE = No Effect

Statement of Financial Position Effects

U = Understatement O = Overstatement NE = No Effect

Ending Inventory Error	Assets	=	Liabilities	+	Shareholders' Equity
Overstated	O		NE		O
Understated	U		NE		U

- An error in ending inventory of the current period will have a reverse effect on profit in the next accounting period
- An error in ending inventory affects retained earnings of the same period
 - But not the next period, as the error reverses

Presentation and Analysis of Inventory

Valuing Inventory at the Lower of Cost and Net Realizable Value

- When the net realizable (fair) value is less than cost, the value is written down
 - The lower of cost and net realizable value (LCNRV) rule
 - NRV is the selling price, less any costs required to make the goods ready for sale.
- Net realizable value is selling price less any costs to make ready for sale
- Assets should not be carried in excess of amounts expected to be realized from their sale or use.

LCNVR Rule – Application

- Apply rule to individual inventory items
- Reduce inventory by crediting it for the amount of write-down, debit is to cost of goods sold
- Reverse write-down if value subsequently recovers
 - When conditions that caused the write-down have changed

Reporting Inventory

- Ending inventory is reported in the current assets section of the statement of financial position at its lower of cost and net realizable value.

The following information should also be disclosed in the financial statements:

1. The total amount of inventory
2. The cost of goods sold
3. The method of cost determination
4. The amount of any write-downs or reversals, including the reasons.

Inventory Turnover

Two ratios to help a company manage how much inventory to keep on hand are:

- Inventory turnover ratio – measures the number of times inventory is sold in a period
- Days in inventory ratio – converts inventory turnover ratio into number of days inventory is held

$$\text{Inventory Turnover} = \frac{\text{Cost of Goods Sold}}{\text{Average Inventory}}$$

$$\text{Days in Inventory} = \frac{365 \text{ Days}}{\text{Inventory Turnover}}$$

The higher the inventory turnover and the lower the days in inventory, the better.

Appendix 6A – Periodic Inventory Systems

- Both inventory cost formulas (FIFO and average) can also be used in periodic systems
- Allocation is made at the end of the period

Periodic System Under FIFO

COST OF GOODS AVAILABLE FOR SALE					
Date		Explanation	Units	Unit Cost	Total Cost
Jan.	1	Beginning inventory	100	\$10	\$ 1,000
Apr.	15	Purchase	200	11	2,200
Aug.	24	Purchase	300	12	3,600
Nov.	27	Purchase	400	13	5,200
		Total	<u>1,000</u>		<u>\$12,000</u>

STEP 1: ENDING INVENTORY				STEP 2: COST OF GOODS SOLD		
Date	Units	Unit Cost	Unit Total			
Nov.	27	400	\$13	\$5,200	Cost of goods available for sale	\$12,000
Aug.	24	<u>50</u>	12	<u>600</u>	Less: Ending inventory	<u>5,800</u>
Total		450		<u>\$5,800</u>	Cost of goods sold	<u>\$ 6,200</u>

Periodic System Under Average

COST OF GOODS AVAILABLE FOR SALE					
Date		Explanation	Units	Unit Cost	Total Cost
Jan.	1	Beginning inventory	100	\$10	\$ 1,000
Apr.	15	Purchase	200	11	2,200
Aug.	24	Purchase	300	12	3,600
Nov.	27	Purchase	400	13	5,200
		Total	<u>1,000</u>		<u>\$12,000</u>

STEP 1: ENDING INVENTORY			STEP 2: COST OF GOODS SOLD		
		\$12,000 ÷ 1,000 = \$12		Cost of goods available for sale	\$12,000
Units	Unit Cost	Total Cost		Less: Ending inventory	<u>5,400</u>
450	\$12	<u>\$5,400</u>		Cost of goods sold	<u>\$ 6,600</u>

Accounts Receivable

- The term *receivables* refers to the amount that are due to a business from its customers or other entities.
- Receivables are claims that are expected to be collected in cash.
- Receivables are considered **financial assets**.

Accounts receivables:

- Amounts owed by customers on account.
- Result from the sale of goods and services.
- Generally expected to be collected within 30 days or so, and are classified as current assets.

Notes receivable:

- Claims where formal instruments of credit – a written promise to repay – are issued as evidence of the debt.
- The credit instruments normally require the debtor to pay interest.
- Normally for periods 30 days or longer.
- May either be current assets or non-current assets, depending on their due dates.

Other receivables:

- Include interest receivable, loans to company officers, advances to employees, and recoverable sales tax and income tax.

Recognizing Accounts Receivable

- A receivable is recorded when service is provided on account or at point of sale of merchandise on account
- A receivable is reduced when cash is collected, a sales discount is taken, or the product is returned by the customer

Accounts Receivable Subsidiary Ledger

- **Subsidiary ledger** is a group of accounts that share a common characteristic (i.e. they are all receivable accounts)
- The subsidiary ledger has a receivable account for each customer.
- The total of all the balances in the customer accounts in the subsidiary ledger should equal the total balance in the general ledger.
- Inventory, accounts payable, and payroll, are other accounts that are supported by subsidiary ledgers.
- A **control account** is a general ledger account that summarizes the subsidiary ledger data.
- Each journal entry that affects accounts receivable must be posted twice.
 - Once to the subsidiary ledger account
 - Once to the general ledger control account.

Interest Revenue

- If a customer does not pay in full within a specified period of time (usually 30 days), an interest (financing) charge may be added to the balance due
- Seller recognizes interest revenue and increases the account receivable balance owed by the customer

Valuing Accounts Receivable

- Credit losses from uncollectible receivables are debited to an account called **Bad Debts Expense**.
 - Used instead of debiting a contra sales account.
- The **allowance method** of accounting for bad debts estimates the uncollectible accounts at the end of each period and shows the estimate in Allowance for Doubtful Accounts.
- Accounts Receivable balance less the Allowance for Doubtful Accounts equals the **net realizable value** or collectable portion of these accounts.

The allowance method has three essential features:

1. Recording estimated uncollectible accounts
 - Any increase to the allowance is recorded as bad debts expense
2. Recording the write-off of an uncollectible account
 - Actual accounts are written off when they are determined to be uncollectible
 - This write-off reduces the allowance
3. Recording the recovery of an uncollectible account
 - If a written-off account is later collected, the write-off is reversed and the collection recorded

Recording Estimated Uncollectible Accounts

Mar. 31	Bad Debts Expense	10,000	
	Allowance for Doubtful Accounts		10,000
	(To record estimate of uncollectible accounts)		

- The balance in the Allowance for Doubtful Accounts is deducted from Accounts Receivable in the current assets section of the statement of financial position:

Accounts receivable	\$200,000
Less: Allowance for doubtful accounts	<u>11,000</u>
Net realizable value	<u><u>\$189,000</u></u>

Estimating the Allowance:

- Most companies use the percentage of receivables basis to determine the allowance
 - Estimate what percentage of receivables are likely to be uncollectible
 - Apply this percentage to total receivables, or

- Apply this percentage to receivables classified according to the length of time they have been outstanding (called **aging the accounts receivable**)
- Once the appropriate estimate for uncollectible accounts is determined, an adjusting entry can be recorded
- The amount of the adjusting entry is the difference between the required balance and the existing balance in the allowance account

Recording the Write-Off of an Uncollectible Account

- When the collection appears unlikely, the account should be written off and removed from the allowance.

Assume that on March 1, 2013, Abrams Furniture's vice-president of finance authorizes a write-off of the \$2,500 balance owed by T.Ebbet, a customer. The entry to record the write-off is:

Mar. 1	Allowance for Doubtful Accounts Accounts Receivable—T. Ebbet (Write-off of T. Ebbet account)	2,500	2,500
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- Bad Debts Expense is not increased when a write-off occurs.
- Under the allowance method, every accounts receivable write-off entry is debited to the allowance account and not to Bad Debts Expense.

Recording the Recovery of an Uncollectible Account

- When a company collects from a customer after the account has been written off.
- Two entries are required:
 - The entry made in writing off the account is reversed to reinstate the customer's account.
 - The collection is recorded in the usual way.

Assume that on July 1, T. Ebbet's fortunes have changed and he now wants to restore his credit with Abrams Furniture. In order to do so, he has to pay the \$2,500 amount that had been written off on March 1. The entries are as follows:

Accounts Receivable—T. Ebbet Allowance for Doubtful Accounts (To reverse write-off of T. Ebbet account)	2,500	2,500
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Cash Accounts Receivable—T. Ebbet (To record collection from T. Ebbet)	2,500	2,500
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Notes Receivable

- Stronger legal claim to assets than accounts receivable; written promise (**promissory note**) to repay

- A credit instrument that normally:
 - Requires the payment of interest
 - Extends for time periods greater than 30 days
- Often accepted from customers who need to extend payment of an account receivable
- Often required from high risk customers

Recognizing Notes Receivable and Interest Revenue

- The note receivable is recorded at its principal value.
- No interest revenue is reported when the note is accepted.

The basic formula for calculating interest on an **interest-bearing** note is:

Face Value of Note	X	Annual Interest Rate	X	Time in Terms of One Year	=	Interest
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- The interest rate specified on the note is an **annual** rate of interest.
- This calculation of interest applies only to short-term notes receivable with interest due at maturity.

Assume that on May 1, Tabusintac Inc. (the payee) accepts a note receivable in exchange for an account receivable from Raja Ltd. (the maker). The note is for \$10,000, with 6% interest due in four months, on September 1.

We record this entry as follows for the receipt of the note by Tabusintac:

May 1	Notes Receivable – Raja Accounts Receivable – Raja (To record acceptance of Raja note)	10,000	10,000
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Interest is calculated as follows:

$$\$10,000 \quad \times \quad 6\% \quad \times \quad 4/12 = \$200$$

or \$50 a month.

If Tabusintac's year-end was May 31, the following adjusting journal entry would be required to accrue interest for the month of May:

May 31	Interest Receivable Interest Revenue (To accrue interest on Raja note receivable)	10,000	10,000
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Honouring of Notes Receivable

- A note is said to be honoured when it is paid in full at its maturity date.

If Raja pays its note when it is due on September 1, the maturity date, the entry by Tabusintac to record collection is:

Sept. 1	Cash Notes Receivable – Raja Interest Receivable Interest Revenue (To record collection of Raja note and interest)	10,200	10,000 50 150
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Dishonouring of Notes Receivable

- A note that is not paid in full at maturity.
- A dishonoured note receivable is no longer negotiable.
- Balance transferred to Accounts Receivable if eventual collection expected
- Balance transferred to Allowance for Doubtful Account if eventual collection not expected

The journal entry to record this is identical to the one above where the note was honoured, except that the debit to Cash would instead be made to the Accounts Receivable account:

Sept. 1	Accounts Receivable	10,200	
	Notes Receivable – Raja		10,000
	Interest Receivable		50
	Interest Revenue		150
	(To record dishonoured Raja note; eventual collection expected)		

If there is no hope of collection, the principal and any accrued interest should be written off. No interest revenue would be recorded, because collection will not occur. The entry to write off the amount is:

Sept. 1	Allowance for Doubtful Accounts (Notes)	10,200	
	Notes Receivable – Raja		10,000
	Interest Receivable		50
	(To write off dishonoured Raja Note)		

Valuing Notes Receivable

- Like accounts receivable, notes receivable are reported to their **net realizable value**.
- Each note must be analyzed to determine its probability of collection.

Statement Presentation of Receivables**Statement of Financial Position**

- Reported in the current assets section
- Following cash and short-term investments
- Only required to disclose net realizable value, but helpful to disclose gross receivables and the allowance for doubtful accounts

Income Statement

- Bad debts expense is reported as an operating expense
- Interest revenue is non-operating

Managing Receivables

There are five steps in managing accounts receivable:

1. Determine who to extend credit to.
2. Establish a payment period.
3. Monitor collections.
4. Evaluate the liquidity of receivables.
5. Accelerate cash receipts from receivables when necessary.

Evaluating Liquidity of Receivables

Liquidity is measured by how quickly certain assets can be converted into cash. The ratio that is used to assess the liquidity of receivables is the **receivables turnover** ratio.

- Measures the number of times, on average, that receivables are collected during the year.

$$\text{Receivables Turnover} = \frac{\text{Net Credit Sales}}{\text{Average Gross Accounts Receivable}}$$

HIGHER IS BETTER

A popular variant of the receivables turnover is to convert it into an **average collection period** in terms of days.

- The average amount of time that a receivable is outstanding.

$$\text{Average Collection Period} = \frac{365 \text{ Days}}{\text{Receivables Turnover}}$$

LOWER IS BETTER

Accelerating Cash Receipts

Loans Secured by Receivables

- One of the most common ways to speed up cash flow from receivables is to borrow money from a bank using receivables as collateral.

Sale of Receivables

- Companies also frequently sell their receivables to another company for cash.

Securitization of Receivables

- Transfer receivables to investors in return for cash through a process called securitization.

Factoring Receivables

- A factor is a finance company or bank that buys receivables from businesses for a fee.
- If the customer does not pay, normally the company is responsible for reimbursing the factor for the uncollected amounts.

PART 1. Multiple Choice (30 marks)

Questions 1 to 10 are each worth 1 mark. Questions 11 to 20 are each worth 2 marks.

1. Retained earnings at the end of the period are equal to:
 - a) Retained earnings at the beginning of the period plus profit minus liabilities
 - b) Assets plus liabilities
 - c) Profit for the period
 - d) Retained earnings at the beginning of the period plus profit minus dividends

2. The statement of financial position and statement of changes in equity are related because:
 - a) The total assets on the statement of financial position is reported on the statement of changes in equity
 - b) The ending amount on the statement of changes in equity is reported on the statement of financial position
 - c) The ending amount on each statement is transferred to the statement of cash flows.
 - d) Both contain information for the corporation

3. Office equipment is classified in the statement of financial position as:
 - a) A current asset
 - b) Property, plant, and equipment
 - c) Shareholders' equity
 - d) A long-term investment

4. The qualitative characteristic that says the value of information should exceed the cost of preparing it is called:
 - a) Relevance
 - b) Understandability
 - c) Cost constraint
 - d) Verifiability

5. The going concern assumption is inappropriate when:
 - a) Liquidity appears likely
 - b) The business is just starting up
 - c) Fair values are higher than costs
 - d) The business is organized as a proprietorship

6. The objective of financial reporting is to:
 - a) Provide information to the Canada Revenue Agency
 - b) Provide financial information that is useful to existing and potential investors, lenders and creditors
 - c) Comply with Accounting Standards for Private Enterprises
 - d) Comply with International Financial Reporting Standards

7. On a classified statement of financial position, current assets are often listed:
 - a) In alphabetical order
 - b) With the largest dollar amount first
 - c) In the order in which they are expected to be converted into cash
 - d) In order of acquisition
8. Which of the following is not a main section of the conceptual framework of accounting?
 - a) The objective of financial reporting
 - b) The going concern assumption
 - c) Financial analysis
 - d) The elements of financial statements
9. For the basic accounting equation to stay in balance, each transaction recorded must:
 - a) Affect two or fewer accounts
 - b) Affect two or more accounts
 - c) Always affect exactly two accounts
 - d) Affect the same number of asset and liability accounts
10. The sequence of steps in the transaction recording process is:
 - a) Analyze → journal → ledger
 - b) Journal → analyze → ledger
 - c) Journal → ledger → analyze
 - d) Ledger → journal → analyze'
11. An accountant has debited an asset account for \$3,000 and credited a revenue account for \$6,000. What can be done to complete the recording of the transaction?
 - a) Nothing further can be done
 - b) Credit a shareholders' equity account for \$3,000
 - c) Debit another asset account for \$3,000
 - d) Credit another asset account for \$3,000
12. Collection of a \$1,500 accounts receivable
 - a) Increases an asset \$1,500; decrease a liability \$1,500
 - b) Decreases a liability \$1,500; increases a shareholders' equity \$1,500
 - c) Decreases an asset \$1,500; decreases a liability \$1,500
 - d) Has no effect on total assets
13. The Town Laundry purchased \$5,500 worth of laundry supplies on June 2 and recorded the purchase as an asset. On June 30, an inventory of the laundry supplies indicated only \$3,000 on hand. The adjusting entry that should be made by the company on June 30 is
 - a) Debit Laundry Supplies Expense, \$3,000; credit Laundry Supplies, \$3,000
 - b) Debit Laundry Supplies Expense, \$2,500; credit Laundry Supplies, \$2,500
 - c) Debit Laundry Supplies, \$2,500; credit Laundry Supplies Expense, \$2,500
 - d) Debit Laundry Supplies, \$3,000; credit Laundry Supplies Expense, \$3,000

14. At December 31, Zacharias Corp reports Salaries Payable of \$25,000 on its statement of financial position. The next payroll amounting to \$40,000 is to be paid in January. What will be the journal entry to record the payment of salaries in January?

- a) Salaries Expense 40,000
 Salaries Payable 25,000
 Cash 15,000
- b) Salaries Expense 40,000
 Cash 40,000
- c) Salaries Expense 40,000
 Salaries Payable 25,000
 Cash 65,000
- d) Salaries Expense 15,000
 Salaries Payable 25,000
 Cash 40,000

15. On September 1, Monmouth Microwaves Ltd signed a 9%, five-month note payable for \$9,000. The amount of interest to be accrued at December 31 is

- a) \$9,810.00
- b) \$810.00
- c) \$337.50
- d) \$270.00

16. A new accountant working for Malawi Limited records \$800 depreciation expense on store equipment at year end as follows:

Depreciation Expense	800
Cash	800

The effect of this entry is to

- a) Adjust the accounts correctly at year-end
- b) Understate expenses on the income statement
- c) Overstate the carrying amount of the depreciable assets at year-end
- d) Understate the carrying amount of the depreciable assets at year-end

17. At December 31, 2012, before any year-end adjustments, Ubanigi Corp's Insurance Expense account had a balance of \$725 and its Prepaid Insurance account had a balance of \$2,900. It was determined that \$1,500 of the Prepaid Insurance had expired. The adjusting balance for Insurance Expense for the year would be

- a) \$2,225
- b) \$1,500
- c) \$1,125
- d) \$725

18. McCloud Realty received a cheque for \$21,000 on July 1, which represents a 6-month advance payment of rent on a building it rents to a client. Unearned Rental Revenue was credited for the full \$21,000. Financial statement will be prepared on July 31. McCloud Realty should make the following adjusting entry on July 31:
- Debit Unearned Rental Revenue, \$3,500; credit Rental Revenue, \$3,500
 - Debit Rental Revenue, \$3,500; credit Unearned Rental Revenue, \$3,500
 - Debit Unearned Rental Revenue, \$21,000; credit Rental Revenue, \$21,000
 - Debit Cash, \$3,500; credit Rental Revenue, \$3,500
19. On November 1, Ye Olde Gift Shoppe signed a 6%, three-month note payable for \$100,000 to help finance increases in inventory for the Christmas shopping season. Assuming no entries have been made previously for the interest on this note, what is the required adjusting entry for the interest accrued to December 31?
- | | | |
|------------------|-------|-------|
| Interest Expense | 1,000 | |
| Interest Payable | | 1,000 |
 - | | | |
|------------------|-----|-----|
| Interest Expense | 500 | |
| Interest Payable | | 500 |
 - | | | |
|------------------|-------|-------|
| Interest Expense | 1,000 | |
| Cash | | 1,000 |
 - | | | |
|------------------|-------|-------|
| Interest Expense | 1,500 | |
| Interest Payable | | 1,500 |
20. The Sayonara Corporation purchased a notebook computer for \$3,000 on December 1. The useful life of the computer is estimated to be 5 years. If financial statements are to be prepared on December 31, the company should make the following adjusting entry:
- Debit Depreciation Expense, \$600; credit Accumulated Depreciation, \$600
 - Debit Depreciation Expense, \$50; credit Accumulated Depreciation, \$50
 - Debit Depreciation Expense \$2,400; credit Accumulated Depreciation, \$2,400
 - Debit Office Equipment, \$50; credit Accumulated Depreciation, \$50

QUESTION 21

Part A. (6 Marks)

- June 4 Willem Corporation purchased \$4,000 worth of merchandise, terms 2/10, n/30 from Cate Corporation. The cost of the merchandise to Cate was \$2,600.
- 10 Willem returned \$700 worth of goods to Cate for full credit. The goods had a cost of \$450 to Cate and were placed back into inventory.
- 13 Willem paid the account

Instructions

Prepare the journal entries to record these transactions in Cate's records. Cate uses the perpetual inventory system.

QUESTION 21**Part B. (5 Marks)**

XPT Incorporation uses a periodic FIFO inventory system.

On December 31, a physical count reveals 130 units remaining in inventory.

Instructions

Using the following information, compute the ending inventory value and the cost of goods sold.

<u>Date</u>	<u>Description</u>	<u>Units</u>	<u>Unit Costs</u>
Dec 1	Beginning Inventory	100	\$20
5	Purchase	500	\$21
11	Sale	480	
18	Purchase	720	\$22
21	Sale	810	
23	Purchase	100	\$23

QUESTION 22 (9 Marks)

The adjusted trial balance of Veejay Corporation at December 31, 2012 included the following selected accounts:

	<u>Debit</u>	<u>Credit</u>
Sales		\$890,000
Sales returns and allowances	\$32,000	
Sales discounts	8,000	
Cost of goods sold	429,000	
Freight out	11,200	
Advertising expense	45,000	
Interest expense	4,500	
Salaries expense	168,000	
Utilities expense	12,500	
Depreciation expense	4,200	
Income tax expense	36,120	
Interest revenue		5,000

Instructions

Use the above information to prepare a multiple-step income statement for the year ended December 31, 2012.

QUESTION 23 (5 Marks)

Broadway Limited had an \$11,200 credit balance in Allowance for Doubtful Accounts at December 31, 2012, before the current year's provision for uncollectible accounts. An aging of the accounts receivable revealed the following:

	\$	Estimated % Uncollectable
Current	375,000	1.5%
1-30 days past due	37,500	4.5%
31-60 days past due	20,000	9%
61-90 days past due	12,500	18%
Over 90 days past due	15,000	45%
Total Accounts Receivable		

Instructions

Prepare the adjusting entry at December 31, 2012, to recognize bad debts expense.

QUESTION 24 (11 Marks)

Note that the Income Statement has been completed. During the year the company issued \$5,000 common shares.

Optimum Corporation
Adjusted Trial Balance
December 31 2012

	<u>Debit</u>	<u>Credit</u>
Cash	\$22,000	
Accounts receivable	30,600	
Merchandise Inventory	25,950	
Prepaid insurance	1,200	
Long-term investments	37,000	
Equipment	26,800	
Accumulated depreciation – Equipment		\$16,080
Leasehold improvements	42,000	
Accumulated depreciation – Leasehold improvements		12,600
Accounts payable		34,400
Salaries payable		1,210
Interest payable		175
Income payable		1,100
Unearned revenue		600
Mortgage payable		35,000
Common shares		50,000
Retained earnings 1 January 2012		30,000
Dividends	10,000	
Income Summary (Profit for the year)		14,385
Totals	<u>\$195,500</u>	<u>\$195,550</u>

Note that \$5,000 of the Mortgage is payable next year.

Instructions

Using the above Trial Balance, prepare a Classified Statement of Financial Position.

Answer Continued